

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

The Applicant wishes to thank the examiners for the courtesy extended to their representative during a personal interview conducted on April 2, 2009. The participants were Examiner Shah, SPE Smits, and David Ward, Reg. NO. 45198.

A summary of the issues discussed during the interview is included in the following comments.

Claims 24-29 have been canceled, and claims 21, 22, 30, and 31 have been amended. The amendments have been drafted in the manner suggested by the examiner for overcoming the 35 USC 101 and 35 USC 103(a) rejections applied to claims 3, 5-8, 11, 21, 22, 30 and 31. Support for the claim amendments is provided for example in Figs. 3 and 8 and paragraphs [0125]-[0135] of the published specification. (It should be noted that references herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments.) The amendments were not presented earlier due to the unforeseeability of the remarks presented in the Final Rejection.

Claims 3, 5, 6, 11, 21, 22, 30, and 31 were rejected, under 35 USC §103(a), as being unpatentable over Jin et al. (JP 08-263096) in view of Nomura (JP 10-207496) and Davidson et al. (US 6,246,345). Claims 7 and 8 were rejected, under 35 USC §103(a), as being unpatentable over Jin in view of Nomura, Davidson, and Kono (JP 08-046517). To the extent these rejections may be deemed applicable to the amended claims, the Applicant respectfully traverses based on the points set forth below.

Claim 21 now recites an acoustic coding apparatus that: (1) divides a plurality of frequency domain transform coefficients into a plurality of domains on a two-dimensional time-frequency plane, such that each domain includes a plurality of frequency domain transform coefficients that are grouped continuously along a time axis, and (2) determines a part of the plurality of domains to be quantization targets based on the power spectrum values of the frequency domain transform coefficients within each domain. The claimed subject matter provides an advantage of enabling coding a signal, which predominantly comprises speech with music and noise superimposed in the background, with high quality using a low bit rate and short delay (see specification page 6, line 25, through page 7, lines 9).

The Final Rejection acknowledges that Jin and Nomura do not disclose the Applicant's claimed subject matter of: (1) dividing a plurality of frequency domain transform coefficients into a plurality of domains on a two-dimensional time-frequency plane, such that each domain includes a plurality of frequency domain transform coefficients that are continuous in a time direction, and (2) determining a part of the domains to be quantization targets (see Final Rejection page 6, third paragraph).

To overcome this deficiency, the Final Rejection proposes that Davidson discloses this subject matter (see page 6, last paragraph).

However, Davidson is directed to quantizing gains and performing quantization and Huffman coding of MDCT coefficients by performing band division of an input signal and performing MDCT of the signals, after band division, into blocks (i.e., subbands). Although signals after band division are transformed into blocks, according to Davidson, this technique is equivalent to general subband division and is, therefore, different from the Applicant's claimed

subject matter of grouping MDCT coefficients on a two-dimensional plane comprised of the time domain and frequency domain.

Additionally, Davidson's disclosure is different from the Applicant's claimed subject matter of dividing a plurality of frequency domain transform coefficients into plurality of domains on a two-dimensional plane such that each domain includes a plurality of frequency domain transform coefficients that are grouped continuously along a time axis. Moreover, Davidson does not disclose the Applicant's claimed subject matter of determining a part of the domains to be quantization targets based on power spectrum values of the frequency domain transform coefficients within each domain.

Accordingly, the Applicants submit that the teachings of Jin, Nomura and Davidson, considered individually or in combination, do not render obvious the subject matter now defined by claim 21. Independent claim 30 similarly recites this subject matter, but with respect to a method. Independent claims 22 and 31 recite an acoustic decoding apparatus and method corresponding to the acoustic coding apparatus and method of claims 22 and 31, respectively, and perform the inverse functionality of the coding apparatus and method.

Therefore, allowance of claims 21, 22, 30, and 31 and all claims dependent therefrom is considered to be warranted.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

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JEL/DWW/att

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